

REMARKS

Claims 1-21 are at issue in the case. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

OBJECTION TO THE DRAWINGS

The reference numeral 34 that identifies the wall is shown in FIG. 1. Paragraph 42 of the specification was amended to describe retainers 66A and 66B that are subsequently identified as the retainer 66.

The insulation layer 77 between the winding wire 24 and the stator segment core 20 is now identified in FIG. 5A. The central portions 53 between the slits that are deformed in a die punch operation are now identified in FIG. 2A. The stack of stator plates 26 is identified in FIG. 5A. No new matter has been entered.

REJECTION UNDER 35 U.S.C. § 112

Applicant traverses the rejection of claims 7, 15 and 20 under 35 U.S.C. § 112, second paragraph. In paragraph 38 of the specification, Applicant describes a die punch operation that is preformed on the central portions 53 that are located between the slits 50 and 52. The die punch operation results in the stator plates 26 being releasably interconnected. Applicant believes that this rejection is now moot.

DOUBLE PATENTING

Applicant respectfully submits that the rejection of claims 1-21 under the judicially created doctrine of double patenting is not ripe. None of the claims of either application (Serial Nos. 09/803,876 or 09/817,559) have been patented. When this issue becomes ripe, Applicant may consider filing a terminal disclaimer.

REJECTION UNDER 35 U.S.C. § 102

Applicant traverses the rejection of claims 1, 5, 8, 9, 13, 16, 18 and 21 under 35 U.S.C. § 102(e) as being anticipated by Koide et al.

Regarding claims 1 and 16, Koide et al. does not show, teach or suggest a stator including a plurality of circumferentially-spaced stator segment assemblies. Regarding claim 9, Koide et al. does not show, teach or suggest a switched reluctance machine that includes a plurality of circumferentially-spaced stator segment assemblies that are arranged around an inner surface of a machine housing.

Koide et al. discloses a stator core that is a unitary or solid stator core in both circumferential and axial directions. Koide et al. has a stator structure that is similar to the stator structure disclosed in the Background in paragraph 4. In paragraphs 15-18 of the Background, Applicant described significant disadvantages with this conventional solid stator core. It is difficult to wind wire in a uniform manner on salient poles of the conventional solid stator cores. Both transfer and needle winding methods achieve less than 65% slot fill. The position of the winding wire varies from one stator pole to the next and from one machine to the next. As a result, the inductance and resistance of the stator pole windings varies even though the same number of winding turns are

used. By providing a circumferentially segmented stator as claimed in claims 1, 8, and 16, the winding wire can be wound precisely. In addition, the torque density of the stator core can be improved. The inductance and resistance of the stator poles can be tightly controlled from one pole to the next and from one machine to the next.

REJECTION UNDER 35 U.S.C. § 103

Applicant traverses the rejection of claims 2-4, 6, 7, 10-12, 14, 15, 17, 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Koide et al. in view of Trago et al.

Trago et al. also has a stator structure that was described in the Background at paragraph 4. Trago et al. discloses a stator that is unitary in the circumferential direction and laminated in an axial direction. Trago et al. fails to segment the stator in a circumferential direction as required by claims 1, 9 and 16. Since claims 2-4, 6, 7, 10-12, 14, 15, 17, 19 and 20 depend directly or indirectly from claims 1, 9 and 16, they are allowable for the reasons set forth in the preceding section.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1211.

Respectfully submitted,

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